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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.      | CONFIRMATION NO. |
|---|-------------|----------------------|--------------------------|------------------|
| 10/719,806  | 11/21/2003  | Leonid Razoumov      | 010052D1                 | 3290             |
| 23696 7590 03/08/2007<br>QUALCOMM INCORPORATED<br>5775 MOREHOUSE DR.<br>SAN DIEGO, CA 92121 |             |                      | EXAMINER<br>MALEK, LEILA |                  |
|   |             |                      | ART UNIT                 | PAPER NUMBER     |
|   |             |                      | 2611                     |                  |

| SHORTENED STATUTORY PERIOD OF RESPONSE | NOTIFICATION DATE | DELIVERY MODE |
|--|-------------------|---------------|
| 3 MONTHS                               | 03/08/2007        | ELECTRONIC    |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/08/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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**Office Action Summary**

Application No.

10/719,806

Applicant(s)

RAZOUMOV ET AL.

Examiner

Leila Malek

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/12/2005</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Priority***

1. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged.

### ***Information Disclosure Statement***

2. The information disclosure statement submitted on 12/12/2005 has been considered and made of record by the examiner.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As to claim 1, Applicant in the preamble of the claim states "A method for improving the performance of a decoder", however in the body of the claim there is no explanation of how the cited steps will improve the performance of the decoder.

Claims 2-7 depend on claim 1; therefore they are rejected as well.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Choi et al. (hereafter, referred as Choi) (US 6,757,537).

As to claim 1, Choi discloses a power control device and method in a mobile communication system (see the abstract and column 1, second paragraph). Choi discloses determining an energy value (i.e. power control parameter has been interpreted as energy value) (see the abstract, column 2, lines 41-52) for a transmission from a first station (interpreted as a base station) to a second station (interpreted as a remote terminal); forming a message carrying the energy value (See Fig. 12, block 1214); and transmitting the message to the second station. Choi discloses all the subject matters claimed in claim 1, except that there is a decoder residing in the second station. However, it would have been extremely well known in the art at the time of invention to use a decoder at the remote station (the receiver) to extract the original transmitted data from the coded information received from the base station.

As to claim 5, Choi discloses that the step of forming a message carrying the energy value comprises: locating the energy value in look-up table (or memory) (see column 2, lines 41-52); and including an index value corresponding to the energy value in the message (see column 16, lines 32-44).

As to claim 6, Choi discloses that the first station is a base station and the second station is a remote station (see the abstract and column 2, lines 42-52).

As to claim 7, Choi further discloses that the first station is a remote station and the second station is a base station (see column 13, last paragraph).

5. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Choi in view of Guo et al. (hereafter, referred as Guo) (US 6,389,034).

As to claim 3, Choi discloses all the subject matters claimed in claim 1, except that the step of transmitting the message (power control information) comprises positioning the message in a preamble. Guo, in the same field of endeavor, discloses an apparatus comprising a base station and plurality of remote terminals. Guo discloses a frame structure, which includes sub-channel information (including power control information) being transmitted from the base station to the remote terminals or vice versa (see column 14, last paragraph). Guo further discloses that transmitting the power control information comprises positioning the information in a sub-packet (See column 14, lines 27-41). It would have been obvious to one of ordinary skill in the art at the time of invention to place the power control information (i.e. value of the signal energy) in the sub-packet to make the extraction of the information fast and easy (i.e. without detecting and processing the header) and as the result make very quick power control adjustments as suggested by Guo (see column 14, lines 29-33).

As to claim 4, Choi discloses all the subject matters claimed in claim 1, except that the step of transmitting the message (power control information) comprises positioning the message between a preamble and a sub-packet. Guo shows that the step of transmitting the message comprises positioning the message between a preamble and a sub-packet (see Fig. 4B). It would have been obvious to one of ordinary skill in the art at the time of invention to position the power control information (i.e. value of the signal energy) between the preamble and the sub-packet to make the

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extraction of the power control information fast and easy (i.e. without processing the preamble) and as the result make very quick power control adjustments as suggested by Guo (see column 14, lines 29-41).

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Choi in view of Kanterakis et al. (hereafter, referred as Kanterakis) (US 6,574,267).

As to claim 2, Choi discloses all the subject matters claimed in claim 1, see above, except that the step for transmitting the message comprises positioning the message in a preamble. Kanterakis, in the same field of endeavor, discloses that in a base station transmitter, data are FEC encoded by FEC encoder 322, and interleaved by interleaver 323. The packet formatter formats data, signaling acknowledgement signal, and transmitting power control signal into a packet (See column 4, first paragraph). Kanterakis further discloses that corresponding with the preamble structure in the uplink there is a corresponding in time power control information symbol and a corresponding in time collision detection field (See column 8, last paragraph). It would have been obvious to one of ordinary skill in the art at the time of invention to modify Choi as suggested by Kanterakis to position the power control information in the preamble in order to inform the power control information to the second station right after the start of data reception and adjust signal power as soon as possible (See column 8, last paragraph).

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leila Malek whose telephone number is 571-272-8731. The examiner can normally be reached on 9AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Leila Malek  
Examiner  
Art Unit 2611

L.M

  
MOHAMMED GHAYOUR  
SUPERVISORY PATENT EXAMINER

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